

Prevention

Partners

Avenues

Cancer: environment plays a big role

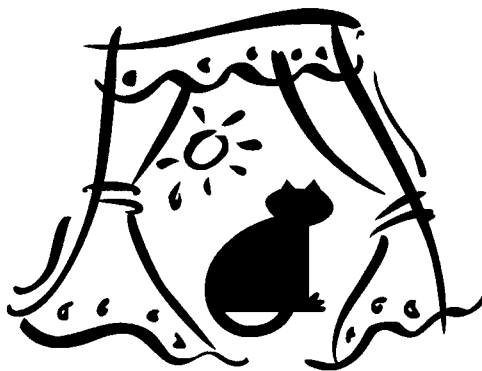
Environmental factors play the principal role in causing cancer, according to a study of twins published this summer in the New England Journal of Medicine.

The study was conducted on nearly 45,000 pairs of Swedish, Danish and Finnish twins, and suggests that we have major gaps in our knowledge of the genetics of cancer. Scientists are currently studying the ways in which genes and the environment interact.

The term environment covers a lot of areas, including air, water, soil, and substances and conditions in the home and workplace. It also includes diet; the use of tobacco, alcohol or drugs; and exposure to chemicals, sunlight and other forms of radiation. Some cancer risk areas, such as diet and tobacco use, can be modified through lifestyle changes.

It is difficult to control what the

environment does on the outside of your home. But the inside is a different story, according to Dr. Andrew Weil, publisher of the *Self Healing* newsletter. There are a



number of things you can do to make the environment better inside. These include the following:

- Minimize moisture. Damp environments breed such irritants as mold, mildew and dust mites.
- Vacuum often if you have pets. You want to keep pet hair and dander from accumulating.
- Use a good-quality doormat and take off your shoes before entering. It's easy to bring dirt, pesticides and other pollutants in via your feet.
- Choose low-emission varieties of carpets and furniture. Furniture made from particleboard can emit formaldehyde, which triggers asthma attacks and can cause cancer. Dr. Weil is also against wall-to-wall carpeting, which he says traps pollutants and may emit harmful chemicals.

- Avoid using artificial air

fresheners. These only mask the problem, not remove it. Also, these products contain chemicals that may act as carcinogens when inhaled.

- Hire a professional to do major jobs. Many older homes contain asbestos and lead paint. Left alone, these substances are harmless. But if there is a removal process, these dangerous compounds are released. So hire a trained contractor to do it for you.

There are some lifestyle changes that can help reduce your risk for cancer. At the top of the list is elimination of tobacco use. Other lifestyle changes that may protect against cancer include the following:

- Using sunscreen when outdoors
- Engaging in regular exercise
- Avoiding excessive alcohol intake
- Maintaining a healthy weight
- Reducing your stress level
- Eating five servings of fruit and vegetables every day
- Eating lean meat
- Eating several servings of grains every day
- Limiting intake of high-fat foods

One of the most dramatic environmental factors that contributes to disease is tobacco smoke. You may think that if you don't

Cancer: environment

Continued on Page 2

The Inside



Fall 2000
Volume 4, Issue 1

Cancer in S.C.
Feelings & Attitude
A Race Against Time
Red Means Stop
Prevention Partners
Order Form

Page 2
Page 3
Page 3
Page 4
Page 4

Cancer: environment

Continued from Page 1

smoke, you're safe. Not necessarily. If you don't smoke but are exposed to cigarette smoke you can still get cancer, particularly in your lungs. The National Cancer Institute has a fancy name for it: environmental tobacco smoke. Most of us know it as secondhand smoke.

Secondhand smoke comes in two forms: sidestream and mainstream. Sidestream smoke is emitted between the puffs from a burning cigarette, pipe or cigar. Mainstream smoke is the smoke which is exhaled. Even if you don't smoke you absorb nicotine and other compounds just like smokers do. Two landmark studies published in 1986 concluded that secondhand smoke could cause cancer in healthy adult nonsmokers. Even in a restaurant that has smoking and nonsmoking sections, nonsmokers may still be exposed to secondhand smoke because the same air space is being shared.

Lung cancer is the most preventable of all cancers as 87 percent of cases can be prevented if people would stop smoking or not start at all.

While you can reduce the risk of

some cancers by avoiding the problem, it's nearly impossible to avoid exposure to environmental pollutants. Air pollution in big cities has long been linked with lung cancer, according to studies. Lung cancer also occurs in large numbers in neighborhoods adjacent to arsenic-emitting smelters, according to other studies.

The Environmental Protection Agency (EPA) estimates that 13,000 lung cancers a year may result from exposure to radon in the home. Radon can enter the home through soil, water or building materials. Testing for radon is simple. You can buy an easy-to-use kit available at most hardware and department stores. Just make sure the label says, "Meets EPA Requirements." If your home tests positive for high amounts of radon, please contact a trained contractor to correct the problem.

There are a few cancers that have significant hereditary factors. These include colorectal, breast, and prostate cancer. For these cancers, early detection, as well as making all of the lifestyle changes mentioned here, can save your life.

Early detection of breast cancer can save many lives. Women covered by the State Health Plan who meet the guidelines are eligible for free baseline mammograms. Women between the ages of 35 and 39 can receive one mammogram

while women between the ages of 40 and 49 can receive a mammogram every other year. Women between the ages of 50 and 74 can receive a mammogram every year. Another early detection tool for women is an annual Pap Smear, which along with appropriate follow-up care, can help eliminate cervical cancer deaths. Colorectal cancer can be prevented with regular screening exams and appropriate follow-up.

At the same time, the National Cancer Institute also says that most cancers are not due to hereditary factors but result from genetic changes that occur within one's lifetime within the cells of a particular organ.

This is not to say that cancer can't be present in multiple cases within a family group. Family cancer clusters have been reported for many types of cancer. But that doesn't mean it is hereditary. Cancer is a common disease. In addition, environmental factors and chance can also be involved. For example, members of melanoma-prone families who avoid significant ultraviolet radiation exposure (staying out of the sun) can greatly reduce their risk of melanoma.

For more information about cancer, contact the National Cancer Institute at 1-800-4-CANCER or on the Internet at www.nci.nih.gov.

South Carolina Budget and Control Board

Jim Hodges, Chairman
Governor

Grady L. Patterson, Jr.
State Treasurer

James A. Lander

Comptroller General

John Drummond

Chairman, Senate Finance Committee

Robert W. Harrell, Jr.

Chairman, House Ways and Means
Committee

Rick Kelly

Executive Director

Office of Insurance Services.

Director:

James E. Bennett, CPCU

Avenues is produced three times a year
by the South Carolina Budget and Control
Board

Address all correspondence to:
Office of Insurance Services
1201 Main Street, Suite 920
Columbia, South Carolina 29201
803-737-3820

Cancer in South Carolina

Cancer has a major impact on the health of South Carolinians. Consider these numbers:

- More than 15,000 South Carolinians are diagnosed with cancer every year.
- More than 7,500 South Carolinians die from cancer every year.
- Lung cancer is the number one cancer killer of South Carolinians.
- South Carolina has the fifth highest cervical cancer rate in the United States.
- South Carolina has the highest prostate cancer death rate in the United States.
- More than 2,000 South Carolinians are diagnosed with colorectal cancer each year.
- More than 2,000 South Carolina women are diagnosed with breast cancer every year.

This information is provided by the S.C. Cancer Registry, American Cancer Society and S.C. Youth Risk Behavior Survey.

Feelings and attitude: more than a state of mind

All of us feel stress at one time or another. When you feel that way, does anyone ever tell you it's all in your head? Well, it isn't. In fact, it can be much more.

Stress takes a physical toll on your body. Studies show that mental stress can lead to an increased risk for heart disease. Consider what happens when you are confronted with a stressful event. Your heart pounds with anxiety. It sinks when you hear disappointing news. It may skip a beat from fear.

Some people get angry a lot. Those who do are at a greater risk for heart trouble, according to a study conducted by the University of North Carolina. Anger raises blood pressure and contributes to hardened arteries, but that's not all. Researchers believe that anger arouses the involuntary nervous system, the network that controls bodily functions like digestion, sweating and heartbeat, and causes the release of stress hormones such as cortisol.

Over time, stress hormones can damage the heart muscle and the delicate linings of surrounding blood vessels as well as disrupt the heart's electrical rhythm. They can also trigger the biochemical process that causes blood platelets to get sticky and clump together, which can lead to artery-clogging plaque.

If you already have coronary artery disease, even just one episode of stress can be deadly. An acute stress episode increases heart rate,

causes blood vessels to constrict (which raises blood pressure) and increases the body's demand for oxygen. This can trigger a condition called ischemia, in which the blood supply to the heart is briefly interrupted. If there is a clot of plaque present, the clot could detach itself from an artery wall and block a blood vessel, triggering a heart attack.

Depression is also a risk factor for heart disease. Psychologist Dr. Robert Carney says that depressed people don't take as good care of themselves, exhibiting behaviors such as not adhering to a heart-healthy diet or taking medication as directed.

Pessimism is a risk factor for death, according to research compiled by the Mayo Clinic. The researchers examined the health status of more than 800 patients and compared their health with the results of a personality test taken 30 years before. The findings were that for every 10-point increase in pessimism score there was a corresponding 19 percent increase in the overall risk of death. The reason could be that pessimists might be less likely to take preventive health action or seek medical help. The immune system could also be effected by changes in stress hormones, with decreases in immune function in more pessimistic people.

It is clear that stress puts a lot of pressure on our bodies. While we can't ever get rid of stress, we can learn to manage it. Sandy Baker, president of Leave Em Laughing, says to use

humor. Crying or yelling can make it worse. But laughing will diminish emotional stress. She says you don't even have to feel happy to laugh. If you laugh, it can put you in a good mood. If stress gets to you, you can get headaches, backaches and even stomachaches. Baker says if something stressful happens at work, just get up and walk out of the room for a few minutes, look at something humorous or talk to a co-worker.

Dr. Carney says to mention the mental stress in your life when visiting your doctor. Alan Rozanski, a New York cardiologist, says to be proactive and tell your doctor what is going on with you. Don't wait for him to ask.

You can also use the half-empty/half-full concept. For example, let's say you didn't get a promotion you expected. You feel upset. Instead of saying you're not good enough, tell yourself that you're successful in many ways.

If you want to brush up on your stress management skills, you can purchase the Tension Tamer program from Prevention Partners. This program includes a participant manual, relaxation audiocassette tape, squeezable computer monitor shaped stress ball and stress dot card. The cost is just \$10.50, which includes sales tax. To purchase Tension Tamer, just use the order form on the back page of this issue.

Managing your stress will protect your overall health.



A race against time

When it comes to caring for heart attack victims there is very little time.

In new guidelines recently released, the American Heart Association is now recommending cardiac defibrillation within five minutes for those heart attack victims outside a hospital and three minutes for those inside a hospital. The previous guidelines, last updated in 1992, simply called for early defibrillation.

Five minutes isn't very much time. It would be virtually impossible for an emergency unit to arrive on the scene within that period of time. That is why the AHA is pushing for increased

availability of Automatic External Defibrillators (AEDs). An AED is about the size of a laptop computer. It can analyze cardiac rhythms and if needed, deliver an electric shock. Some police departments and airports already carry them. The AHA would like to see the machines positioned in public buildings, sports arenas and airports.

Studies have shown that when defibrillation is administered within the first few minutes of cardiac arrest, the survival rate is as high as 90 percent. But with each minute of delay, the chance of survival falls by 10 percent.

In another change to the cardiopul-



monary resuscitation (CPR) guidelines, the AHA is advising that people giving CPR skip taking the pulse of heart attack victims because they often get it wrong which wastes valuable time. Instead, the focus should be on checking other signs and beginning chest compressions to clear a victim's airway.

The AHA has a course available, Basic Life Support Heartsaver Automatic External Defibrillator Course, that teaches both basic CPR and the use of an AED. This course also teaches how to recognize the signs of four major emergencies: heart attack, stroke, cardiac arrest and foreign-body airway obstruction.

Red means stop

You may have done it, you may have seen others do it. Many drivers run a red light or stop sign at some point in their lives. But they probably don't think about the consequences. They should.

Disregarding red lights and other traffic signals represent the cause of 22 percent of urban vehicle accidents, according to the Insurance Institute for Highway Safety. The economic impact is estimated at \$7 billion a year in medical costs, time missed from work, insurance rate increases and property damage. The Institute estimates that red light running causes 750 deaths and more than 250,000 injuries a year in the United States. It also reports that injuries occur in 45 percent of red light crashes.

Vehicles crash a lot in South Carolina. In 1999, there was a crash an average of every five minutes,

according to the S.C. Department of Transportation. Traffic deaths in 1998 far outnumbered those from homicides, suicides and HIV infection, according to DOT.

Nationwide, there were almost 1.8 million intersection accidents in 1998, including those caused by drivers running red lights, according to the U.S. Department of Transportation. These crashes resulted in nearly 1.2 million injuries and more than 8,000 deaths.

So it pays to stop for that red light or stop sign.

A combination of education and technology is being used to address the problem.

In 1998, the U.S. DOT launched a nationwide campaign to crack down on red light running. "National Stop on Red" weeks were held in 1998 and

1999. The program has included safety education, increased police presence and red light photo enforcement.

Cameras mounted at intersections have led to a 60 percent reduction in violations, according to the Federal Highway Administration. While photo enforcement of red light violations is relatively new in the United States, it has been widely used in Europe, Canada, Australia and New Zealand since the 1970s. In 1994, New York became the first American city to use the technology. The results have been dramatic as the city experienced a 62 percent dropoff in violations at the intersections that were photo-enforced.

The State Health Plan Prevention Partners encourages all readers of *Avenues* to obey traffic signals. Stopping for red lights and stop signs helps save lives and prevents injuries.

Prevention Partners Order Form

Please use this order form to order Prevention Partners materials. Indicate in the box before each item how many you wish to order. All prices include sales tax. The following materials and programs are currently available:

Every Step Counts - is Prevention Partners' new walking program. The program includes a pedometer with storage bag and a pocket sized instruction guide. Cost: \$15.75.

Back on Track - This back pain and injury prevention program consists of a participant manual, exercise videotape, dyna-band and instructions and towel. Cost: \$10.50.

Tension Tamer - Our Stress management program consists of a participant manual, relaxation cassette tape, computer-shaped stress ball and stress dot card. Cost: \$10.50.

Take Care of Yourself - A 302 page soft-cover book on self-care and when to see the doctor. Cost: \$7.35.

Weight Management - This three CD set consists of Executive Diet Helper, Menu Planner and Weight Loss Planner. Cost: \$10.50.

Fast Food Guide - Pocket-size guide with information on cholesterol, sodium and other important ingredient information from most major fast food chains. Cost: \$1.58.

Please make checks payable to the **Office of Insurance Services**. Sorry, no cash or purchase orders are accepted.

Name: _____

Address: _____

City: _____ State: _____ ZIP: _____

Telephone: _____ Work: _____ Home: _____

Mail to: Prevention Partners, Office of Insurance Services, 1201 Main Street, Suite 920, Columbia, SC 29201.